

WHAT IS CLAIMED IS:

1. Apparatus for making laminated pads, each pad comprising a body laminated with at least a first cover layer, said apparatus comprising:

5 a first cutting roll at a first cutting station for cutting a fiber web as it is fed through a first cutting nip to form individual bodies in the web arranged in predetermined positions relative to one another;

10 a sealing roll at a sealing station defining a sealing nip, wherein the sealing roll receives said at least first cover layer from a cover web feed apparatus for lamination with said bodies to form a laminated web adapted to pass through said sealing nip for sealing of the laminated web by said sealing roll;

15 said first cutting roll and said sealing roll having axes of rotation lying in a first plane and having outer surfaces spaced from one another a distance in said first plane;

20 a first vacuum transfer cylinder rotatable for conveying the bodies from the first cutting station toward the sealing station while maintaining the bodies in their predetermined positions relative to one another, said first vacuum transfer cylinder having an axis of rotation spaced from said first plane and having a diameter greater than said distance between said first cutting roll and said sealing roll;

25 said first vacuum transfer cylinder and said first cutting roll being spaced apart to define a first transfer nip for transfer of the bodies from the first cutting roll to the first vacuum transfer cylinder, and said first vacuum transfer cylinder and said sealing roll being spaced apart to 30 define a second transfer nip for transfer of the bodies from the first vacuum transfer cylinder to the sealing roll; and

35 an adjustment mechanism for varying the spacing between the axis of rotation of the first vacuum transfer cylinder and said first plane thereby to adjust the spacing at the first and second transfer nips.

2. Apparatus as set forth in claim 1 wherein said adjustment mechanism is adapted for moving the first vacuum transfer cylinder relative to said first cutting roll and said sealing roll.

3. Apparatus as set forth in claim 2 wherein said adjustment mechanism comprises a mounting assembly for rotatably mounting said first vacuum transfer cylinder, and an actuator for moving said mounting assembly.

4. Apparatus as set forth in claim 3 wherein said mounting assembly comprises a slide plate slidably received in a pair of guide rails, said first vacuum transfer cylinder being rotatably mounted on said slide plate, and wherein said
5 actuator slidably moves the slide plate in the guide rails.

5. Apparatus as set forth in claim 4 wherein said actuator comprises a screw shaft connected to said mounting assembly, said screw shaft being rotatable in one direction to move the mounting assembly to increase the spacing at said
5 first and second transfer nips and rotatable in a second direction to move the mounting assembly to decrease the spacing at said nips.

6. Apparatus as set forth in claim 5 wherein the diameter of said first transfer cylinder is larger than the diameter of the cutting roll and the diameter of the seal roll.

7. The apparatus as set forth in claim 5 further comprising:

a second cutting roll at a second cutting station for cutting said sealed laminated web to form pads, said second
5 cutting roll having an axis of rotation lying in said first plane;

a second transfer cylinder rotatable for conveying said sealed laminated web from a third transfer nip between said

10 sealing roll and said second transfer cylinder toward a
fourth transfer nip between said second transfer roll and
said second cutting roll while maintaining the web in said
predetermined position on the second transfer roll, said
second transfer cylinder having an axis of rotation spaced
from said first plane; and

15 a second adjustment mechanism for varying the spacing
between the axis of rotation of the second transfer cylinder
and said first plane thereby to adjust the spacing at the
third and fourth transfer nips.

8. The apparatus as set forth in claim 1, wherein said
first cutting roll comprises an outer surface with vacuum
openings therein for holding said bodies in said
predetermined positions, said cutting roll being rotatable to
5 convey the bodies from the first cutting nip to said first
vacuum transfer cylinder while maintaining the bodies in said
predetermined relative positions.

9. The apparatus as set forth in claim 1 wherein said
sealing roll comprises an outer surface having vacuum
openings therein for conveying said bodies from said second
transfer nip to said sealing nip while maintaining the bodies
5 in said predetermined relative positions.

10. The apparatus as set forth in claim 9 further
comprising a third vacuum transfer cylinder rotatable about
an axis of rotation, said second cutting roll being rotatable
about its axis of rotation to convey said pads from the
5 second cutting nip to a fifth transfer nip between the second
cutting roll and the third vacuum transfer cylinder while
maintaining the pads in a predetermined position relative to
one another, and a third adjustment mechanism for varying the
spacing between the axis of rotation of the third transfer
10 cylinder and said first plane thereby to adjust the spacing
at the fifth transfer nip.

11. A method of adjusting pad-making apparatus,
comprising:

mounting a first cutting roll at a first cutting station
for cutting a fiber web as it is fed through a first cutting
5 nip to form individual bodies in the web arranged in
predetermined positions relative to one another;

mounting a sealing roll at a sealing station defining a
sealing nip, the sealing roll being adapted to receive at
least a first cover web from a cover web feed apparatus for
10 lamination with said bodies to form a laminated web adapted
to pass through said sealing nip for sealing of the laminated
web by said sealing roll;

said first cutting roll and said sealing roll, as
mounted, having axes of rotation lying in a first plane and
15 having outer surfaces spaced from one another a distance in
said first plane;

mounting a first vacuum transfer cylinder having a
diameter greater than said distance between said first
cutting roll and said sealing roll in a position wherein an
20 axis of rotation of the cylinder is spaced from said first
plane and the cylinder is spaced from the first cutting roll
and said sealing roll to define first and second transfer
nips, respectively; and

varying the spacing between the axis of rotation of the
25 first vacuum transfer cylinder and said first plane thereby
to adjust the spacing at the first and second transfer nips.

12. A method as set forth in claim 11 further
comprising removing at least one of said first cutting roll
and said sealing roll and replacing it with a cutting roll or
sealing roll of different diameter, and re-adjusting the
5 spacing at said first and second transfer nips by varying the
spacing between the axis of rotation of the first vacuum
transfer cylinder and said first plane.

13. A method as set forth in claim 1 wherein said
spacing between the axis of rotation of the first vacuum
transfer cylinder and said first plane is varied by moving

the first vacuum transfer cylinder relative to said first
5 cutting roll and sealing roll.

14. A method as set forth in claim 13 wherein said first vacuum transfer cylinder is moved along a linear path relative to said first cutting roll and sealing roll to adjust the spacing at the first and second transfer nips.

15. A method as set forth in claim 14 further comprising raising said first vacuum transfer cylinder to increase the spacing at said first and second transfer nips and lowering said first vacuum transfer cylinder to decrease
5 the spacing at said first and second transfer nips.

16. The method as set forth in claim 1 wherein said pads are interlabial pads.

17. An interlabial pad made using the method of claim
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